

REMARKS**Summary of the Office Action**

The Office Action alleges, at page 2 that no certified copy of the priority document has been received in this application.

Claims 6-10 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Suzuki et al. (Japanese Patent No. 7-211280) (hereinafter "Suzuki").

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kash et al. (U.S. Patent No. 5,940,545) (hereinafter "Kash") in view of Suzuki.

Summary of the Response to the Office Action

Applicants have amended independent claims 1 and 6, and added new dependent claims 11 and 12, to differently describe embodiments of the disclosure of the instant application. Accordingly, claims 1-12 are currently pending and under consideration.

Priority Document Issues

The Office Action alleges, at page 2 that no certified copy of the priority document has been received in this application. Applicants respectfully traverse this assertion because it is currently Applicants' understanding that the certified copy of the Japanese priority document (JP P2003-181546, filed in Japan on June 25, 2003) has been received in this national stage application from the International Bureau in accordance with PCT Rule 17.2(a). See the Form PCT/IB/304 that was filed on December 22, 2005 in this application regarding this issue. Accordingly, it appears that, at page 1 of the Office Action (PTOL-326 Form), the box next to "All" in section 12) should have been checked by the Examiner. As a result, acknowledgement

of receipt of the certified copy of the Japanese priority document for this application is respectfully requested. To the extent that any of Applicants' understandings are incorrect, specific clarification is requested in the next Office Communication.

Rejections under 35 U.S.C. §§ 102(b) and 103(a)

Claims 6-10 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Suzuki. Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kash in view of Suzuki. Applicants have amended independent claims 1 and 6 to differently describe embodiments of the disclosure of the instant application. To the extent that these rejections might be deemed to still apply to the claims as newly-amended, the rejections are respectfully traversed for at least the following reasons.

Applicants respectfully submit that in Suzuki, meshed dynodes are utilized, while MCPs are utilized in the arrangements described in independent claims 1 and 6 of the present application. Therefore, the position where a voltage is applied is different from each other.

In addition, Applicants respectfully submit that in Suzuki, different voltages are applied to the dynodes 210_1 to 210_N , so stepwise potentials are formed from the photoelectric surface 100 to signal output part 300. As a result, electrons are accelerated and collide against dynodes. On the other hand, in the arrangements described in independent claims 1 and 6 of the present application, different voltages are applied to an input face and an output face, so a potential difference is formed in the channel of MCP. As a result, Applicants respectfully submit that electrons are accelerated in the channel and collide against an inner wall of the channel.

Applicants respectfully submit that in Suzuki, the photodetection outputting part 600 is connected to all dynodes 210_1 to 210_N via the voltage division part 500 so that different voltages

can be applied to the dynode respectively. On the other hand, in the arrangements described in independent claims 1 and 6 of the present application, the pulse reading circuit (for example, a combination of capacitor 87 and resistor 86) is only connected to the output face 24b of the first micro channel plate 24 so that a potential change of the output face 24b of the first micro channel plate 24 can be acquired as a pulse signal.

Applicants also respectfully submit that in Suzuki, the photodetection outputting part 600 acquires a signal from signal output part 300. Therefore, the photodetection outputting part 600 cannot acquire a pulse due to a potential change of dynode.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. §§ 102(b) and 103(a) should be withdrawn because neither Suzuki nor Kash, whether taken separately or in combination with each other, teach or suggest each feature of independent claims 1 and 6 of the instant application, as newly-amended. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Also, MPEP § 2143.03 instructs that "'[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.' In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)."

Furthermore, Applicants respectfully submits that the dependent claims 2-5 and 7-12 are allowable at least because of their dependence from newly-amended independent claims 1 or 6, and the reasons discussed previously. Newly-added dependent claims 11 and 12 further describe that the pulse reading circuit comprises a capacitor or a transformer connected to the output face

of the first micro channel plate. See, for example, capacitor "87" in Fig. 2 and transformer "98" in Fig. 8 of the drawings of the instant application in these regards.

CONCLUSION

In view of the foregoing, Applicants submit that the pending claims are in condition for allowance, and respectfully request reconsideration and timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response; the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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